CHAPTER 6:

Funding Strategies for Achieving Interoperability

Once consensus to seek an interoperable radio communication system is reached, the most difficult part of the process begins—funding the system. How much funding is needed will depend on the method chosen to achieve interoperability. The least expensive methods include channel patching or using a cache of radios. Funding for these interim solutions can often be found in existing budgets, but these methods have significant limits to their usefulness as discussed in Chapter 3.

Developing a funding strategy

A funding strategy is a plan for how you will pay for all components needed during the entire life cycle of a system—the financial resources required for planning, operations, training, maintenance, and system replacement. A funding strategy may include more than one funding source. For example, a funding strategy could include financing the planning process with funds from the current budget, new equipment purchases through capital appropriations, and equipment replacement through a lease-purchase agreement over a period of several years.

Does your funding strategy for radio communication systems promote interoperability within your own jurisdiction? With other jurisdictions? If the answer is no, you are not alone. Many jurisdictions have started replacing their systems without thinking of ways to improve interoperability among their own agencies, but you can pave the way for interoperability by preparing for the next budget cycle.

· Understand the scope of the communications challenge. Make sure that agencies can provide an accurate, detailed report on the extent of the interoperability problem and what infrastructure and funds are really needed in the next year and in the next 5 years.



Current budgeted amounts for communication systems can help to address the cost factor when combined with reallocated sources of funds and new funding resources, including Federal and private grants, leasing of infrastructure, and fees.

- Determine what is already being spent on radio communications technology on an annual basis. Your jurisdiction may already be spending dollars that can be incorporated into plans to replace or upgrade existing systems. Reprioritize those dollars to ensure that communications spending supports interoperability.
- Learn what cost-reduction strategies have been considered recently to handle the entire communication problem, not just radio communications. Traditional approaches to these projects, such as stand-alone systems built to serve one agency or one jurisdiction, can inhibit the consideration of different, more cost-effective approaches.

The key is to work together. As a group comes together, each participant can identify their own potential sources of funding. Identify ways that these sources can be tied together within the local, State, regional, and Federal government partners.

Cost-cutting measures

The highest degree of interoperability is achieved when government entities agree to migrate to a single communication system that provides coverage for all. For a variety of reasons, trunked systems are usually the technical choice in this case, but, unfortunately, these systems are very expensive and require action by a governmental body to fund them. Currently budgeted funds for communication systems will not be enough to fund long-term efforts to achieve interoperable radio communication systems such as trunked systems. They can help to address the cost factor when combined with reallocated sources of funds and new funding resources, including Federal and private grants, leasing of infrastructure, and fees. The first step, however, is to look at innovative ways to cut the costs of implementing interoperability.

Many public safety agencies use shared systems and resources instead of building independent systems. Not only do shared systems support interoperability, jurisdictions can save money by leveraging economies of scale in making expenditures. Shared systems can be between different levels of government, such as a local, State, and Federal shared system; by several jurisdictions at the same level of government, such as several counties sharing resources; or by multiple agencies within one jurisdiction, such as one system for law enforcement, the fire department, and EMS. Partnering to create interoperable radio communication systems is practical aside from the financial considerations. It makes sense to

share tower sites and other infrastructure—nobody wants more towers in their neighborhood.

Shared systems

When multiple agencies or governments share a system, unfeasible under conventional systems, costs of the new system will automatically reduce for each agency. The cost of the infrastructure, controller, towers, fixed equipment, connectivity between the towers and its ongoing costs (maintenance, leased lines for connectivity, etc.) are shared.

Volume pricing

Lower pricing, especially for user equipment, can be a byproduct of a shared system because of the higher volumes. It also can result in better pricing than smaller agencies could ever obtain because their purchases can be combined with those of larger agencies to obtain volume discounts. Developing purchasing alliances or compacts are another method of lessening costs. Agencies with similar needs may be duplicating each other's purchases.

Use of existing infrastructure

The cost of constructing a new tower with the site improvements and equipment needed for public safety can cost over \$300,000 before the costs of the manufacturer's fixed equipment is added. If a governmental entity owns infrastructure that can be used for the new system or commercially available infrastructure can be found, significant reductions in costs can be realized. Tower companies will sometimes build towers for a prospective user of the site, such as a cellular or pager company, or to lease space for communication systems. The tower owner receives the benefit of having an anchor tenant. The conversion of upfront capital costs to long-term leasing costs can be of great benefit. Depending on how good the leasing rate is and how long the leased site is used, the cost of leasing can equal or even exceed the cost of constructing a new tower. A specific fiscal analysis must be conducted to determine which method makes sense.

Shared information

Contacting other governmental units that have already contracted with prospective vendors can provide valuable information on the prices the vendor has charged to others.

Presenting the case for funding interoperability

Radio communication systems are technologically complex and often less visible than other capital investments. The need to upgrade this critical infrastructure is often misunderstood. Separate local and State governance creates barriers to more effective, efficient, and often less costly shared systems.

Public officials know the difficulties in obtaining funding for more visible equipment such as new patrol cars, fire trucks, or ambulances. Obtaining funding for a new interoperable communication system is even more difficult. Examples of ways to present the case for funding interoperability include the following:

- Provide examples of other entities that have implemented a similar system and saved money over the cost of developing a stand-alone system.
- Bring in outside experts to confirm your position and confirm the benefits are real.
- Provide cost figures, if possible. Provide the assumptions used to develop the cost.
- Indicate cost-saving measures that have been taken to demonstrate fiscal responsibility.
- Engage the media's interest and therefore the public's long before the issue comes up for a vote by the fiscal body. Take the media and key decisionmakers on a ride-along to observe the problem firsthand. Demonstrate the difference between the old system and the new for the media and, if possible, for the decisionmakers.
- At the public hearing, fill the room with the persons most affected by whether or not the system is funded—public safety personnel in uniform. Make sure the attendees are representative of all the prospective agencies. Make sure that uniformed personnel contact their representatives consistently.
- · Bring in other public officials who intend to become a part of the new system and who can testify that funding is necessary.

Financing methods

Financing methods most often used include lease purchase agreements, capital appropriations, and bond proceeds. A government entity can use more than one financing method to achieve full funding. It is important to remember that financing methods used to fund assets like radio communication systems generally must match the life of the asset. For instance, individual radios usually cannot be financed using bonds, but radio communication systems can.

Lease purchase agreements or fee for service

With most jurisdictions facing shrinking budgets, the search for alternative financing methods that do not require large capital investments has led to fee for service or lease purchase agreements. A private company or source can build and own the communications system and lease it back to a government entity for a charge, which usually includes a maintenance agreement.

Capital appropriation

As opposed to long-term financing, capital appropriation is in the pay as you go category. The funding comes from revenues that are collected from current year taxes and fees. The government entity sets aside the funds to be used for capital projects that usually take less than 10 years to pay back. Capital appropriations are also used to reduce dependency on long-term financing.

Bond proceeds

This is a long-term financing method that can be used for purchases that average 20 years to pay back. For instance, a government entity needing \$5 million for towers and other infrastructure could prepare a public bond issue. The government entity obtains the money right away and makes payments through their debt service budget. A stream of revenue will still need to be identified to satisfy bondholders.

Revenue enhancement

Some local and State governments have adopted specific fees, increased existing fees, or diverted some of the revenues from existing fees to fund new communication systems. *The Report Card on Funding Mechanisms for Public Safety Radio Communications*, a detailed report by the Public Safety

Wireless Network (PSWN) Program, a program of the U.S. Department of Treasury and the Federal Bureau of Investigation, provides an in-depth review of existing funding options and new funding mechanisms.

- E-9-1-1 fees—Funding for interoperability can come from fees collected from special fees, such as the enhanced 9-1-1 fee for both landline and wireless communications. These funds are normally used to fund call taking and dispatch equipment in the dispatch center and equipment to determine the location of a wireless caller. Expect opposition from telephone companies who currently receive a great deal of the monies from these fees for lease or sale of the equipment, as well as from some dispatch operators who fear that they will receive less funding.
- User fees—Many interoperable communication systems charge user fees to other agencies based on the number of radios used by the agency. This is particularly effective in funding long-term costs; however, charging user fees can present fiscal and psychological barriers for agencies deciding to come on to the system.
- Motor vehicle fees—Some States have used either existing fees or increased fees on motor vehicle and boat transactions. Due to the large number of transactions, these fees can generate significant funds.
- Gaming fees—Several States have gaming operations that generate significant sums of revenue. Diversion of the existing revenue collected or increasing the amount of revenue collected can provide a significant source of funds, both in the short and long term.

Transportation funds

Some transportation funds can be used for public safety communications. Federal Intelligent Transportation Systems (ITS) and Congestion Mitigation and Air Quality (CMAQ) funds have been used for this purpose.

Public/private partnerships

Revenue can be generated by using a governmental entity's assets (towers or land) to develop leasing revenue from a commercial communications company. Of course, this can present significant public issues.

Other funding sources

Are you aware of the existing funding available through State and Federal sources that can supplement your local resources? Funding sources should be reviewed and prioritized based on whether they are currently available, they will last more than a year or two, and whether you can reasonably predict that this source will be around in the future.

A list of potential Federal funding sources can be found at the end of this guide.